

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

**CASTLEMORTON WIRELESS, LLC,  
Plaintiff,**

**-v-**

**BOSE CORPORATION,  
Defendant.**

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**CAUSE NO.:  
6:20-CV-00029-ADA**

**ORDER DENYING DEFENDANT’S MOTION TO DISMISS**

This is a patent infringement suit. It involves a patent held by Plaintiff Castlemorton Wireless, LLC (“Castlemorton”) that, after a long and tortuous prosecution history, now contains an error in one of its claims. Defendant Bose Corporation (“Bose”) has moved to dismiss Castlemorton’s direct infringement claim, contending that the Court is not authorized to correct this error, that this error makes the claim indefinite, and that Castlemorton’s direct infringement claim consequently fails as a matter of law. Bose further argues that Castlemorton’s complaint fails to plead facts sufficient to support its induced infringement claim. For reasons explained below, the Court **DENIES-IN-PART** and **GRANTS-IN-PART** Bose’s motion to dismiss.

**Background<sup>1</sup>**

**I. Inventions’ History**

The patent at issue in this case, No. 7,835,421 (the “’421 patent”), “relates to the detection of a carrier frequency of a direct spread signal spectrum (‘DSSS’) in wireless communications.” Compl. [#1] ¶ 2. The inventions described by the ’421 patent were so

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<sup>1</sup> At this stage of litigation, the Court is required to view all factual allegations in Castlemorton’s complaint as true. *See, e.g., Aschcroft v. Iqbal*, 556 U.S. 662, 678 (2009).

revolutionary the governments of the United States and the United Kingdom<sup>2</sup> issued secrecy orders prohibiting publication of the patented inventions. *Id.* ¶ 3. These secrecy orders were consistently renewed, and the inventions described in the '421 patent were consequently not published for more than twenty-five years. *Id.* ¶¶ 3, 26.

As noted above, the '421 patent teaches a method and system for detecting carrier frequencies in DSSS. DSSS is a technique developed for military wireless communications whose “essential idea is to spread the wireless signal over a wider bandwidth to make jamming and interception more difficult.” *Id.* ¶ 39. DSSS is also capable of “smear[ing] out” noise that’s present on a narrower frequency band, which in turn allows the received signals to be perceived more clearly. *Id.* ¶ 43.

The shortcoming of the DSSS technique was that many early systems had difficulty distinguishing the intended carrier signal from undesired transmissions, or “noise.” *Id.* ¶ 44. Existing systems also struggled with “correlating [a] received signal so that a carrier frequency could be identified.” *Id.* ¶ 46. The upshot of these deficiencies was that these systems required a long time to identify and acquire carrier signal frequencies, which impeded efficient wireless communications. *Id.* ¶ 52. It was this problem the '421 patent was designed to solve.

The method behind the inventions described in the '421 patent is relatively straightforward. The technology receives a DSSS modulated signal—i.e., “a signal spread over a frequency band”—then subtracts the DSSS signal from a higher frequency. Resp. [#22] at 7.<sup>3</sup> “This process generates a frequency[-]inverted signal that is used to identify the carrier

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<sup>2</sup> The inventions described in the '421 patent arose from the work of Geoffrey Bagley, a Briton who was employed by the Royal Signals and Radar Establishment, a scientific research group within the UK’s Ministry of Defence, which explains the UK’s interest in the secrecy of the described inventions. *See* Compl. [#1] ¶¶ 1, 4.

<sup>3</sup> For ease of reference, all citations to page numbers are to the CM/ECF pagination.

frequency and thus decode the signal” and has been incorporated in Wi-Fi devices that comply with the IEEE Std. 802.11b and 802.11g standards. *Id.*

## II. Prosecution History

The application that led to the ’421 patent was first submitted to the United States Patent and Trademark Office (“PTO”) in 1983. *Id.* at 8. In early 1990, a set of amended claims were submitted to the PTO. *Id.* The relevant language of the amended claim—which became claim 6 of the ’421 patent—was as follows:

A method of detecting the carrier frequency of a DSSS signal including the steps of: subtracting the DSSS signal from a [higher frequency signal to produce] signal having a higher frequency than any frequency in the DSSS signal spectrum to produce DSSS signal frequency spectrum inversion . . . .

*Id.* at 9. Later that year, the PTO issued a “Notice of Allowability” and allowed the previously submitted claims. *Id.* This Notice of Allowability was still subject to the ongoing secrecy orders, and therefore publication of the patent was still prohibited. *Id.*

The PTO eventually lifted the secrecy order on April 12, 2010. *Id.* at 10. When it came time to print the claims in the patent grant, however, an error in photocopying cut off the ends of two words: it omitted the “l” from the last use of the word “signal” (creating the typo “signa”) and omitted the “y” from the word “any” (creating the typo “an”). *Id.* In November 2010, the PTO published the ’421 patent; while the published patent did not contain the typo for the word “signal,” it did retain the typo for the word “any.” Consequently, the relevant language of claim 6 currently reads as follows:

A method of detecting the carrier frequency of a DSSS signal including the steps of: subtracting the DSSS signal from a signal having a higher frequency than an frequency in the DSSS signal spectrum to produce DSSS signal frequency spectrum inversion . . . .

*See* Compl. [#1-1] Ex. A at 6. For reasons that are not explained in the record, to date Castlemorton has not submitted a notice of correction to the PTO based on the “an”/“any” error.

On January 16, 2020, Castlemorton filed suit against Bose Corporation, alleging direct infringement of the '421 patent as well as indirect infringement “by actively inducing infringement under 35 U.S.C. § 271(b).” Compl. [#1] ¶ 86. Bose now moves to dismiss Castlemorton’s complaint on two grounds. First, Bose argues that the erroneous phrase “an frequency” is indefinite and therefore it cannot be liable for direct infringement. Second, Bose argues Castlemorton’s indirect infringement claim should be dismissed because it fails to plead pre-suit knowledge of the '421 patent, any pre-suit knowledge of alleged infringement, or the specific intent to induce infringement of the '421 patent. This motion has been thoroughly and cogently briefed and is ripe for decision.

### **Analysis**

#### **I. Direct Infringement**

##### **A. Reasonable Correction for “An Frequency”**

While both parties acknowledge the term “an frequency” is an error, Bose contends that error is not amenable to correction by this Court because there are multiple reasonable corrections to the error. Castlemorton responds that the face of the '421 patent and the prosecution history demonstrate there is only one possible reasonable correction, and the Court is therefore empowered to amend the claim to account for this correction.

Ordinarily, corrections to claim language requires applying for and receiving a certificate of correction by the PTO. However, district courts may correct an error in a patent where no certification has been issued if: (1) the correction is not subject to reasonable debate to a person of ordinary skill in the art based on consideration of the claim language and the specification; and (2) the prosecution history does not suggest a different interpretation of the claims. *See Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1354 (Fed. Cir. 2003); *see also Ultimax*

*Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1353 (Fed. Cir. 2009) (holding that the determination of the reasonableness of the correction “must be made from the point of view of one skilled in the art”). “The error must be evident on the face of the patent, but the prosecution history should be consulted to ascertain whether there is only a single reasonable construction.” *Fargo Elecs., Inc. v. Iris, Ltd., Inc.*, 287 F. App’x 96, 102 (Fed Cir. 2008). The purpose behind correcting obvious errors in a claim is to give the claim “the meaning which was intended by the applicant and understood by the examiner.” *I.T.S. Rubber Co. v. Essex Rubber Co.*, 272 U.S. 429, 442 (1926).

Bose insists the “an frequency” language in claim 6 cannot be corrected by the Court because there are at least two<sup>4</sup> reasonable corrections: either “a frequency” or “any frequency.” Mot. Dismiss [#17] at 5. Castlemorton responds the face of the ’421 patent and the prosecution history demonstrate the only reasonable correction is “any frequency.” Resp. [#22] at 15–17. The Court agrees with Castlemorton.

The first hint that “any frequency” is the only reasonable correction in claim 6 comes from the language in claim 1. That claim—whose language is nearly identical to the language in claim 6—describes:

A detector for determining the carrier frequency of a symmetrical, direct sequence, spread spectrum (DSSS) signal . . . including: (1) means for subtracting the DSSS signal from a signal having a higher frequency than any frequency in the DSSS signal spectrum and for producing a frequency inversion of the DSSS signal spectrum.

Compl. [#1-1] Ex. A at 6. Recall that claim 6 describes the operative “method of detecting the carrier frequency.” *Id.* Bose does not explain why the ’421 patent would describe a method of

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<sup>4</sup> Initially, Bose argued there were only two reasonable corrections: “a frequency” or “any frequency.” See Mot. Dismiss [#17] at 5. In its Reply in Support, Bose proffered two additional possible corrections: the insertion of a modifier beginning with a vowel (such as “angular,” “oscillator,” or “intermediate”) between “an” and “frequency,” and the expansion of “an” to “another.” Reply [#24] at 6–7. Bose makes no attempt to explain why either of these latter two corrections would be reasonable to a person of ordinary skill in the art, and the Court concludes they are not reasonable corrections. Accordingly, the Court focuses its analysis on the “a”/“any” dispute.

detecting a carrier frequency in different language than the language used to describe the detector utilizing that method, nor does it explain why the '421 patent would use “a frequency” in claim 6 when it used “any frequency” in nearly identical language thirty lines earlier. In fact, Bose’s only argument on this discrepancy is that “the inclusion of [the ‘any frequency’] language in one claim does not necessitate that the limitation should be included in all other claims.” Mot. Dismiss [#17] at 10. While this may be true as a general principle, it does not speak to whether the applicant for the '421 patent intended for the language in claim 6 to be identical to the language in claim 1. The face of the '421 patent makes clear that was the applicant’s intent.

More evidence can be found earlier in the '421 patent. For example, in describing how the invention works, the '421 patent explained that “[t]he oscillator frequency is arranged to be higher than the largest frequency in the DSSS signal of interest”—or, in other words, higher than any frequency in the DSSS signal of interest. Bose attempts to create a conflict in this language by overly parsing the phrase “higher than the largest frequency,” arguing that “the largest frequency” connotes a single frequency (in which case “a frequency” is reasonable) while “higher than the largest frequency” connotes all frequencies in the DSSS spectrum (in which case “any frequency” is reasonable). But this “controversy” is one of Bose’s own creation and ignores the described method of the patent as well as grammatical rules on restrictive phrases. And ultimately, this argument is self-defeating: if the frequency at issue can be described as higher than both “a frequency” and “any frequency,” then whichever correction the Court might make will not effect the scope of the claim, and therefore there is no reason to avoid correction. *See CBT Flint Partners, LLC v. Return Path, Inc.*, 654 F.3d 1353, 1359 (Fed. Cir. 2011)

(“Because each of the three proposed reasonable interpretations would result in the same claim scope . . . a person of skill in the art would readily know [the] meaning of the claim . . .”).<sup>5</sup>

Finally, and of greatest import, the prosecution history confirms “any frequency” is the only reasonable correction. Bose does not dispute that this is correct, but instead argues the prosecution history cannot be used by the Court to determine what correction is reasonable. *See* Reply [#24] at 11. As Bose’s own arguments make clear, however, that is not an accurate description of the law. It is true that the prosecution history may not be used to determine whether there is an error on the face of the patent. *See, e.g., H-W Tech., L.C. v. Overstock.com, Inc.*, 758 F.3d 1329, 1334 (Fed. Cir. 2014). But that principle is inapposite where, as here, the parties agree there is an error on the patent’s face but disagree on the reasonable correction of that error. In fact, the Federal Circuit explicitly commands district courts to consult the prosecution history to “ascertain whether there is only a single reasonable construction.” *Fargo*, 287 F. App’x at 102. And the prosecution history—which indicates the “an frequency” error was the result of faulty photocopying—confirms that “any frequency” is the only reasonable correction in this case. *See* Resp. [#22-2] Ex. 1 at 3; *id.* [#22-5] Ex. 4 at 4.

Ultimately, Bose’s only argument for why “a frequency” is a reasonable correction is nothing more than that “a” and “an” are both indefinite articles. *See* Mot. Dismiss [#17] at 8. If the evidence supporting “any frequency” as a reasonable correction were similarly scant, the Court might be inclined to find the error incapable of correction. But the claim language and

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<sup>5</sup> In a Notice filed in response to Castlemorton’s sur-sur reply, Bose points to Castlemorton’s Infringement Contentions in which Castlemorton refers to the disputed language in Claim 6 as “a frequency” rather than “any frequency.” *See* Notice [#43] at 1. The Court is admittedly puzzled as to why Castlemorton’s Infringement Contentions would use the term “a frequency” when the record plainly demonstrates the only reasonable correction is “any frequency.” But this disparity is inconsequential because Bose fails to show that “a frequency” would change the scope of the patent to a person of reasonable skill in the art. In other words, even accepting Bose’s contention that “a frequency” is a reasonable correction, Claim 6 would still not be indefinite and Bose’s motion to dismiss would still fail.

prosecution history make clear that “any frequency” is the only reasonable correction for the error in claim 6, and the Court will interpret claim 6 accordingly.<sup>6</sup>

## **B. Failure to State a Claim**

Bose further contends that Castlemorton fails to state a claim for relief on direct infringement. Under the Federal Rules of Civil Procedure, each claim in a complaint must include “a short and plain statement . . . showing that the pleader is entitled to relief.” FED. R. CIV. P. 8(a)(2). The claims must include sufficient factual allegations, accepted as true, to state a claim for relief that is facially plausible. *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009); *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 570 (2007). “A claim has facial plausibility when the plaintiff pleads sufficient factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Iqbal*, 556 U.S. at 678. Although a plaintiff’s factual allegations need not establish the defendant is probably liable, they must establish more than a “sheer possibility” a defendant has acted unlawfully. *Id.* Courts are commanded to construe the complaint in favor of the plaintiff and take all well-pleaded facts as true. *Gonzalez v. Kay*, 577 F.3d 600, 603 (5th Cir. 2009). However, the plaintiff must plead “specific facts, not mere conclusory allegations,” *Tuchman v. DSC Commc’ns Corp.*, 14 F.3d 1061, 1067 (5th Cir. 1994), and a court is not bound to accept legal conclusions couched as factual allegations. *Papasan v. Allain*, 478 U.S. 265, 286 (1986).

Bose argues Castlemorton fails to meet Rule 8’s pleading standard because “Castlemorton critically glosses over the indefinite language ‘an frequency’ in claim 6 when addressing the alleged infringement of Bose’s accused products.” Mot. Dismiss [#17] at 13. This

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<sup>6</sup> There is one more fact that indicates the weakness of Bose’s position on the error in claim 6. In addition to Bose, Castlemorton has sued fourteen other entities in this Court for infringement on the same technology at issue in this case. Not one of these other fourteen defendants have argued there is more than one reasonable correction to “an frequency.”



overly semantic argument is meritless. Castlemorton alleges the accused products “perform the step of subtracting the spread spectrum signal [i.e., the DSSS signal] from a higher frequency than the DSSS signal spectrum.” Compl. [#1] ¶ 76. This method—subtracting a DSSS signal from a signal with a higher frequency than the DSSS signal spectrum—is precisely the method described in claim 6. *See* Compl. [#1-1] Ex. A at 6. Furthermore, Castlemorton alleges specific facts as to precisely how the accused products utilize this method, including the spectrum in which the accused products are able to identify a carrier frequency, the detectors used, and the chip rate. *See id.* ¶¶ 72, 76–77, 82. These are hardly “mere conclusory statements” that fail to plausibly allege Bose is liable for infringement of the ’421 patent, and the Court accordingly denies Bose’s motion to dismiss Castlemorton’s direct infringement claim.

## **II. Indirect Infringement**

Bose also argues Castlemorton’s indirect infringement claim fails as a matter of law for two reasons. First, Bose contends the complaint fails to plead pre-suit knowledge of the ’421 patent or pre-suit knowledge of patent infringement. Mot. Dismiss [#17] at 15. Second, Bose contends the complaint fails to plead facts plausibly supporting Bose’s specific intent to encourage others’ infringement. *Id.* at 16. The Court considers each argument in turn.

### **A. Knowledge of Patent and Infringement**

“[L]iability for inducing patent infringement attaches only if the defendant knew of the patent and that ‘the induced acts constitute patent infringement.’” *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1926 (2015).

Castlemorton’s complaint specifically alleges that “Bose has had knowledge of the ’421 patent since at least the service of this Complaint or shortly thereafter,” that “Bose knew of the ’421 patent and knew of its infringement, including by way of this lawsuit,” and that “Bose

specifically intended and was aware that the normal and customary use of the accused products would infringe the '421 patent.” Compl. [#1] ¶ 87–88. Bose does not contest that it had knowledge of the '421 patent after Castlemorton filed its complaint, nor does it contest that it knew the accused technology infringed on the '421 patent after Castlemorton filed its complaint.

Because Castlemorton’s complaint does not plead any facts that would support an allegation of pre-suit knowledge, the Court agrees with Bose.

### **B. Specific Intent**

Bose next argues Castlemorton fails to adequately plead Bose had the specific intent to cause direct infringement. Mot. Dismiss [#17] at 16. “Evidence of ‘active steps . . . taken to encourage direct infringement,’ such as advertising an infringing use or instructing how to engage in an infringing use, show an affirmative intent that the product be used to infringe . . . .” *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 936 (2005).

Castlemorton’s complaint alleges Bose’s accused products “detect[] a carrier frequency of a direct sequence spread spectrum signal in compliance with the IEEE 802.11b and/or IEEE 802.11g wireless standard.” Compl. [#1] ¶ 56. It further alleges that “[b]y complying with the 802.11b and/or 802.11g standard, the Bose '421 products necessarily infringe the '421 patent” because those standards require the same elements as are required by claim 6. *Id.* ¶ 63. Thus, under Castlemorton’s theory of liability, the very operation of Bose’s accused products constitutes a direct infringement of the '421 patent. And because any effort by Bose to help its customers utilize the features of its accused products—including distributing how-to guides and other reference materials—necessarily results in the customers’ infringing the patent, these materials are properly characterized as “instruct[ions on] how to engage in an infringing use.” *Grokster*, 545 U.S. at 936. Castlemorton’s theory may be proven incorrect in later proceedings,


but the complaint includes “sufficient factual content [to] allow[] the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Iqbal*, 566 U.S. at 678.

Because Castlemorton’s complaint does not plead any facts that would support an allegation of pre-suit knowledge, the Court **GRANTS** Bose’s motion to dismiss Castlemorton’s indirect infringement claims. But given that it may have been impossible for Castlemorton to do so without the benefit of fact discovery, in accordance with the Court’s usual practice, the Court permits Castlemorton to amend its complaint after the start of fact discovery to include pre-suit indirect infringement if it is able to elicit sufficient facts to support such an allegation. *See, e.g., Parus Holdings Inc. v. Apple Inc.*, No. 6:19-cv-00432-ADA, Dkt. 101 (W.D. Tex. Jan. 31, 2020).

### **Conclusion**

In sum, the Court concludes Claim 6 is not indefinite because the only reasonable correction for the “an frequency” error is to substitute “any frequency.” It further concludes Castlemorton’s complaint alleges sufficient facts to support its claim for direct infringement. It finally concludes Castlemorton’s complaint does not allege sufficient facts to support its claim for indirect infringement, but allows Castlemorton to amend its complaint to include an allegation of pre-suit indirect infringement after fact discovery begins. Accordingly, the Court finds Defendant Bose Corporation’s Motion to Dismiss Plaintiff Castlemorton’s Complaint Pursuant to Federal Rule of Civil Procedure 12(b)(6) [#17] should be and hereby is **DENIED-IN-PART** and **GRANTED-IN-PART**.

**SIGNED** this 22nd day of July, 2020.



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ALAN D ALBRIGHT  
UNITED STATES DISTRICT JUDGE